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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,709	04/16/2004	Anilkumar Ganapati Gaonkar	77046	1774

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FITCH EVEN TABIN AND FLANNERY
120 SOUTH LA SALLE STREET
SUITE 1600
CHICAGO, IL 60603-3406

EXAMINER	
DONOVAN, MAUREEN C	
ART UNIT	PAPER NUMBER

1761

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,709

Applicant(s)

GAONKAR ET AL.

Examiner

Maureen C Donovan

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-16,18,20-24 and 27-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-16,18,20-24 and 27-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to communications: Amendment A, filed 27 December 2004.
2. Claims 1, 4-16,18,20-24 and 27-37 are pending.
3. Claims 2,3,17,19,25 and 26 have been cancelled.
4. The rejections made under 35 USC § 112 in the previous Office Action with regard to claims 4,5,6,21 and 22 are withdrawn in light of the amendments to the claims.

Claim Objections

1. Claim1 objected to because of the following informalities: "Layer" is misspelled on line 4 of the claim. Appropriate correction is required.

Specification

2. The disclosure is objected to because of the following informalities: Application number 10/304,446 was filed in 2002, not in 2003 as it now states at the beginning of the disclosure. Appropriate correction is required.

Terminal Disclaimer

1. The terminal disclaimer filed on 27 December 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application number 10/304,446 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Amendment

1. The amendment filed 27 December 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material, which is not

Art Unit: 1761

supported by the original disclosure, is as follows: The amendment to the disclosure stating that the solid fat content (SFC) changes “at least” 20 percent. The disclosure previously stated that the SFC changed less than 20 percent and it is the deletion of this information that is interpreted as new matter, since new matter includes not only the addition of wholly unsupported subject matter, but may also include adding specific percentages or compounds after a broader original disclosure, or even the omission of a step from a method, see MPEP §706.03(o). Applicant does state that “at least” 20 percent can find support in Example 1, however, since both “at least” 20 percent and “less than” 20 percent were present in the originally filed disclosure, applicant needs to provide more rationale as to why “at least” 20 percent is the chosen subject matter and why “less than” 20 percent was omitted, applicant should specifically point out the support for any amendments made to the disclosure; see MPEP § 2163.06.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1,4-9,11,14-16,20-24,27,29,32-34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbach, US patent number 5,130,151 in view of the combination of Sauer, US patent number 5 520 942 and Cebula, US patent number 5 147 670.

Averbach discloses an edible moisture barrier composition (see Column 2, lines 43-47) comprising: from 1 to 10% by weight (see Column 8, lines 51-58) of an edible high melting lipid (see Column 6, lines 42-55) having a melting point of 70°C or higher (see Column 6, Table 2) and an edible low melting triglyceride blend (see Column 4, lines 28-31 and Column 7, lines 39-40) wherein the edible high melting lipids are high melting waxes (see Column 4, lines 3-12) and the edible, low melting triglyceride blend is selected from the group consisting of natural, hydrogenated oils such as palm oil and soybean oil (see Column 3, lines 35-61). Averbach also discloses a method for reducing moisture migration between foods comprising applying an

edible moisture barrier composition to a food component, the moisture barrier effective for reducing moisture migration between foods (see Column 3, lines 17-35).

Averbach does not disclose the particle size of the high melting lipid, the presence of a hydrophobic barrier layer, the solid fat content of the barrier or the thickness of the barrier.

Sauer teaches coatings for food products wherein additives are sprayed onto a food product in the form of a coating, the additive being an edible moisture barrier (see Column 2, lines 54-62). The edible moisture barrier as taught by Sauer comprises edible waxes, such as carnauba wax (see Column 8, lines 49-67 and Column 9, lines 1-6), which has a melting point greater than 70°C, as shown in Averbach (see Column 6, Table 2). Sauer teaches that the particles supplied in the spray, which includes the moisture barrier particles, are 1-100 microns in size, which would include a volume average particle size of 10 microns (see Column 4, lines 57-67 and Column 5, lines 1-9). Sauer also teaches that the additives can be provided in a fat and oil solvent, such as vegetable oils (see Column 5, lines 10-40 and Column 8, lines 63-38 and Column 9, lines 1-6). Note that the office interprets the particle size as taught by Sauer to meet the limitation that the lipids are “microparticulated”, since if the additives in the coating are less than 10 microns, and the coating additives are high melting lipids, such as waxes, then those high melting lipids are also less than 10 microns.

Incorporating the particle size as taught by Sauer into the invention as disclosed by Averbach would have been obvious to one of ordinary skill in the art at the time of the invention. Both references are directed to edible moisture barriers, and since Averbach does not specifically disclose what size particles are used, the ordinarily skilled artisan would have necessarily referred to teachings of known systems in the art in order to determine the optimal size, such as that of Sauer. Sauer specifically states that the coating additives are moisture barriers, and thus it would not have involved an inventive step for one of ordinary skill in the art to have utilized the particle size of Sauer for the moisture barrier of Averbach. Additionally, it would have been obvious since the particle size as taught by Sauer would increase the surface area available for initial sensory impact, thereby improving the taste of the food product (see Column 5, lines 1-4), and allowing a thinner layer of coating to be applied to the food product that had the same capability as a thicker coating (see Column 4, lines 57-68).

Cebula teaches an edible moisture barrier, wherein the edible moisture barrier is 20 microns to 1 mm thick and 200 to 500 microns thick (see Column 5, lines 1-3). Cebula teaches a solids fat content of from 50 to 100 weight percent at a storage temperature of a food product onto which the edible moisture barrier composition is applied (see Column 3, lines 18-32), wherein the barrier composition has a solids fat content of less than 25 weight percent above 37°C (see Column 3, lines 33-45) and wherein the solid fat content changes at least 20 weight percent over a temperature range between 20°C and 37°C (see Column 3, lines 18-45). Note that since Cebula teaches a solid fat content at a storage temperature of 20°C of 50% and a solid fat content at 37°C of 20%, Cebula inherently teaches a solid fat content change of at least 20 weight percent over a temperature range between 20°C and 37°C. Cebula also discloses that the lipid layer comprises a dispersion of solid particles, the solid particles selected from the group consisting of solid particles of chocolate (see Column 4, lines 50-56) wherein the Office interprets the references teaching of cocoa mass as including solid particles of chocolate. Cebula discloses using multiple layers of moisture barriers (see Column 5, lines 4-13), including a film of paraffin wax, which is interpreted to be a hydrophobic layer.

Using the thickness as taught by Cebula for the edible moisture barrier as disclosed by Averbach in view of Sauer would have been obvious to one of ordinary skill in the art at the time of the invention since both are directed to edible moisture barriers and since the thickness yields good organoleptic properties (see Column 4, lines 66-68).

Using a solid fat content as taught by Cebula in the invention as disclosed by Averbach in view of Sauer, would have been obvious to one of ordinary skill in the art at the time of the invention since both are directed to edible moisture barriers and since a high solids content at normal storage would ensure the barrier remains solid (see Column 3, lines 18-22) and a low solids content at 37°C would ensure good organoleptic properties at mouth temperature (see Column 3, lines 33-38).

Incorporating solid particles as taught by Cebula into the invention as disclosed by Averbach in view of Sauer would have been obvious to one of ordinary skill in the art at the time of the invention since both are directed to edible moisture barriers and in order to produce a moisture barrier that also provided a flavor to the product it was used on (see Column 4, lines 50-56).

Incorporating a hydrophobic barrier layer as taught by Cebula with the moisture barrier layer as disclosed by Averbach in view of Sauer and making the moisture barrier multilayered would have been obvious to one of ordinary skill in the art at the time of the invention since both are directed to edible moisture barriers and since adding another layer with hydrophobic properties would increase the moisture barrier effectiveness in higher moisture storage conditions, the additional layer providing additional protection for the food product.

With regard to claims 18,35 and 37: It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the additional hydrophobic layer as taught by Cebula within the range as taught by Cebula for the initial moisture barrier layer (see Column 5, lines 1-3) since a layer of thickness within 50microns to 1mm would be efficient, since it was already taught by Cebula as being preferred and since Cebula does not teach separate thickness guidelines for this layer it would not have involved an inventive step for one of ordinary skill in the art to use the thickness as already taught by Cebula for the first layer for the additional layers.

Response to Arguments

Applicant's arguments, see Amendment A, filed 27 December 2004, with respect to the 35 U.S.C. 102(b) rejection(s) over Cebula have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as applied above. It is noted however, that Cebula is still applied in the above rejection and is used as a teaching of properties and characteristics desirable in edible moisture barriers in general. Although Cebula teaches a barrier composition differing from that as instantly claimed, Cebula's teachings regarding desired solid fat content, barrier thickness, and multilayered barriers are nevertheless interpreted as being relevant despite the compositional differences, since they are applicable to edible moisture barriers in general.

Applicant's arguments filed 27 December 2004 with respect to the rejections made over Sauer have been fully considered but they are not persuasive. At page 11 of the response, applicant states that Sauer does not describe a microparticulated lipid and that one of ordinary skill in the art would have no motivation to select high melting lipids or to combine the high melting lipid with a low melting triglyceride. This is not deemed persuasive. Sauer states that the

Art Unit: 1761

coating applied to food contains additives, the additives being of the size of 1-100 microns and those additives being moisture barrier additives, therefore absent any clear and convincing evidence or arguments to the contrary the moisture barrier additives of Sauer are considered to be microparticulated. In addition the moisture barrier additive of Sauer is carnauba wax, which is a high melting lipid, and therefore it is submitted that one of ordinary skill in the art would be motivated to select a high melting lipid. Sauer also teaches that the additives are provided as a coating in the presence of a solvent of fat or oil in the supercritical fluid, therefore it is submitted that Sauer would have given one of ordinary skill in the art reason to combine the high melting wax and a triglyceride.

2. Claims 10,12,13,28,30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbach in view of Sauer and Cebula as applied to claims 1, 4-9,11,14-16,20-24,27,29,32-34 and 36 above, and further in view of Germino, US patent number 4 671 963.

Averbach in view of Sauer and Cebula disclose all the features of the instantly claimed invention except for using calcium stearate.

Germino teaches an edible moisture barrier composition comprising from 16 to 37 weight percent (see Column 2, Example 1 table) of an edible high melting lipid having a melting point of 100°C or higher (see Column 2, lines 18-22), the edible high melting lipid being calcium stearate (see Column 2, lines 18-22), wherein it is noted that calcium stearate has a melting point of 179-180°C as evidenced by Lange's Handbook of Chemistry (15th Edition, Copyright 1999).

Using calcium stearate as taught by Germino in the invention as disclosed by Averbach in view of Sauer would have been obvious to one of ordinary skill in the art at the time of the invention since both are directed to edible moisture barriers and since using calcium stearate will maintain the crunchy and chewy textural characteristics of a food product in the presence of moisture (see Germino, Column 1, lines 41-45).

Response to Arguments

Applicant's arguments filed 27 December 2004 have been fully considered but they are not persuasive. At page 11 of the response, applicant states that Germino is in a non-analogous

Art Unit: 1761

art and that there is no suggestion that calcium stearate could be combined with an edible low melting triglyceride blend or to microparticulate this lipid. This is not deemed persuasive.

In response to applicant's argument that Germino is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Germino is directed towards spraying foods with a coating that allows them to maintain their textural characteristics in the presence of moisture (see Column 1, lines 41-45), which is interpreted to be the same field as moisture barriers.

In response to applicant's arguments that there is no suggestion that calcium stearate could be combined with an edible low melting triglyceride blend: The calcium stearate of Germino is combined in the Germino reference with at least one triglyceride (see Column 2, lines 23-25), therefore it is submitted that Germino does suggest using calcium stearate with triglycerides. Additionally the motivation to use calcium stearate in Averbach in view of Sauer and Cebula is based upon Germino's teachings that the calcium stearate will maintain the chewy and crunchy textural characteristics of the food.

In response to applicant's arguments that there is no suggestion that calcium stearate could be microparticulated: It is submitted that it is not necessary for Germino to teach microparticulation since, the motivation and suggestion to microparticulate the moisture barrier is derived from the Sauer reference and not from Germino.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

Art Unit: 1761

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,9,10,11,12,13,14,20,27,28,29,30,31 and 32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,2,3,6,9,12,13,14,15,16,17,18,21,24,27,28,29,30,31,32,33,36 and 37 of U.S. Patent No. 6,472,006 in view of Cebula. U.S. Patent No. 6,472,006 claims an edible moisture barrier and a method of reducing moisture migration between foods, the moisture barrier composition of U.S. Patent No. 6,472,006 encompassing the moisture barrier composition as instantly claimed. U.S. Patent No. 6,472,006 does not claim that the barrier includes a hydrophobic layer. Cebula discloses using multiple layers of moisture barriers on food products (see Column 5, lines 4-13), including a film of paraffin wax, which is interpreted to be a hydrophobic layer. Incorporating a hydrophobic barrier layer as taught by Cebula with the moisture barrier layer as claimed by U.S. Patent No. 6,472,006 and making the moisture barrier multilayered would have been obvious to one of ordinary skill in the art at the time of the invention since both are directed to edible moisture barriers and since adding another layer with hydrophobic properties would increase the moisture barrier effectiveness in higher moisture storage conditions, the additional layer providing additional protection for the food product.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen C Donovan whose telephone number is (571) 272-2739. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MCD


KEITH HENDRICKS
PRIMARY EXAMINER